



Athens Radio Club, Inc
October 2000

Officers

President - Ed Rollor, N4ZRA n4zra@arrl.net
Vice President - James L. Reeves, KF4AQO kf4aqo@aol.com
Secretary - Elaine Scales, KE4TYW kescscales@webtv.net
Treasurer - Jack Shrum, K4AHN jshrum@home.com
Public Information Officer - Philip Koehler, AF4TQ af4tq@arrl.net
Repeater Trustee - Bob Richards, AA4AI richards@athens.net

Executive Committee Members

Jeff Crowell, KD4AOZ (2002) kd4aoz@arrl.net
Bob Herrin, KE4JLL (2000) berrin@bigfoot.com
Richard Matthews, KR4OS (2001) matthews@elbert.k12.ga.us
Ed Riddle, N4ALE (2001) n4ale@msn.com
Ken Schroder, N4NFI (2000) kcs@rx.uga.edu
Robert Scales, KE4OGD (2002) ke4ogd@webtv.net

Assigned Positions

Emitter Editor - Melanie Rollor, KG4DRY kgrdry@arrl.net
Public Service Coordinator - Bob Herrin, KE4JLL berrin@bigfoot.com
Technical Specialist - Ed Rollor, N4ZRA n4zra@arrl.net
Listserve and E-Mail List Administrator - Jim Gifford, KD4PPG jim@giffords.net
Web Page Administrator - Mike Ellerson, KS4JU mellerso@arches.uga.edu
Membership Chairman - Steve Schwab, KT4Q sschwab@cdgroup.com
Property Control Chairman - Phil Koehler, AF4TQ af4tq@arrl.net
Official Emergency Station Chairman - Ed Fuqua, N4VHA n4vha@arrl.net
Business and Structure Committee - Jack Shrum, K4AHN jshrum@home.com
APRS Committee - Mike Ellerson, KS4JU mellerso@arches.uga.edu
Nick Bettis, KR4MS mikasa-nb@email.msn.com
Repeater Committee - Bob Richards, AA4AI richards@athens.net
Jeff Crowell, KD4AOZ kd4aoz@arrl.net
American Red Cross Liaisons - David McElhannon, KE4EOI
Ed Rollor, N4ZRA n4za@arrl.net



President's QSO

Since November is election month we need to look over a few details concerning the Athens Radio Club. First, please take time to read the Athens Radio Club, Inc. By-laws concerning election procedures (included in this edition of the Emitter) so that we all understand the election process.

Secondly, I hope that every club member will consider serving in some capacity, especially if you have not served anytime in the past. It is important that we as a club have turnover in key officer positions so as to increase our diversity and effectiveness. This year we need to fill the positions of President, Vice-president, Secretary, Public Information Officer, and two Executive Committee members. Jack Shrum, K4AHN, will be staying on as our Treasurer for at least one more year to help stabilize the club in the most difficult area of financial accountability. Bob Herrin, KE4JLL, and Ken Schroder, N4NFI, have finished up their third year as Executive Committee members. As a matter of record Jeff Crowell, KD4AOZ, and Richard Matthews, KR4OS, will complete their 3-year term in 2001 and Ed Riddle, N4ALE, and Robert Scales, KE4OGD, will finish their terms in 2002.

Thirdly, I would like to encourage all club members to attend the December club meeting. This meeting is central to the operation of the club and gives direction to the Officers and the Executive Committee as we as a club decide on our goals for the year 2001. Vision is a great divider of successful clubs and those that "just exist". With vision there is development for the club, club individuals, and the community, that can only be appreciated as years prove the wisdom of the chosen visions. We must not forget that vision must be accompanied by determination to see a plan to fruition and a willingness to invest time, sweat and money even when no one else may care. Our Vision 2000 provided us with a challenge and direction for the year. The ARC members have worked hard to see these goals completed. We will look at the progress of the club in the Vision 2000 in the November Emitter.

Fourthly, as you may already know I will not be serving a third term as ARC President. I have learned a lot, but most of all I have come to know club members and their true interest in Amateur Radio. Everyone has treated me with the utmost respect and has made an effort to be more involved. I have received great advice over these past 2 years and hopefully I have done my best to make the changes that have been requested. Everyone has been patient with me and my many shortcomings. The club as a whole has made great progress not because of my efforts, but because of hardworking, caring club members.



Minutes from October 2000 ARC Meetings

Minutes of the ARC Meeting of October 3, 2000

(Submitted by Elaine Scales, KE4TYW)

October 3, 2000

The meeting was called to order by President Ed Rollor, N4ZRA. There were 17 members and 5 guest present. Members of Boy Scout Venture Crew #305 were present.

Ed Rollor, N4ZRA

Elections will be held during the November ARC meeting.

The phone patch is up and running again. The club now owns it's own phone patch equipment.

Jerry Mount, KC4JRL donated an antenna to the club. We thank Jerry for his donation.

We are trying to get people working damage assessment with the Red Cross to become interested in ham radio. This is because most of us are so busy and often unable to assist. N4ZRA has written a letter for the Red Cross newsletter.

James, KF4AQO has made us a shoulder patch. Research is being done to determine price.

Secretary's Report: Elaine Scales, KE4TYW

Minutes were approved as they were submitted on the ARC@tin-can.net listserver.

Treasurer's Report: Jack Shrum, K4AHN

Beginning balance was \$2,028.26. Total expenses were \$195.17. Total income was \$10.00. This leaves a balance of \$1,843.09.

Membership forms are being updated. This should help organize membership.

Public Service Event Coordinator's Report: Bob Herrin, KE4JLL

Everyone is encouraged to participate in the Ga. football games. Everyone participating should bring a H.T. and earphones.

The Oconee County Scarecrow race will be on October 21, 2000. Participants will meet at Aunt Gail's Restaurant for breakfast.

Scott Sikes, KD4MSR:

Boy Scouts and Girl Scouts world wide have Jamboree On The Air (JOTA) on Saturday October 21, 2000 at Sandy Creek Park.

NE Ga. Council of Boy Scouts will be having their fall camporee. N4VHA and N4ZRA have volunteered to do demonstrations. Everyone is encouraged to come-out and help with radio demonstrations.

ARES Coordinator's Report: James Reeves, KF4AQO

Effective 10/29/00 the HF ARES net's time will be changed to 5:00pm. ARC ARES net will remain at 8:30pm on Sunday nights. The Bubba Net group has been checking-in. This is appreciated. Local check-ins average 6 to 12. Everyone is encouraged to check-in and also to volunteer for net control.

October 2000 SET: Ed Rollor, N4ZRA

There will be an 80-meter net and a 40-meter net. The 40 frequency is 7.275. Everyone is encouraged to check-in. The time is 8:00 until noon. It will involve reports on Red Cross shelters. If you pass a message, please remember to announce that this is a simulated test message both at the beginning and the end.

Program: James Reeves, KF4AQO

Emergency Equipment for the Emergency-minded Amateur Radio Operator.

Executive Committee Meeting Minutes

October 25, 2000

(Submitted by Ed Rollor, N4ZRA)

The Executive Committee met on Wednesday, October 25th to discuss the following details:

1. The next ARC Fund-raiser, and
2. The possibility of installing a freestanding tower at the ARC shack.

ARC Executive Committee members and officers that were in attendance:

Bob Herrin, KE4JLL

James Reeves, KF4AQO

Ed Riddle, N4ALE

Ed Rollor, N4ZRA

Richard Matthews, KR4OS

Jeff Crowell, KD4AOZ

Jack Shrum, K4AHN

Invited Guests:

Ed Fuqua, N4VHA

James Geeter, KG4CWA

Ed, N4VHA, and James, KG4CWA, requested permission to use club funds to have another fund-raiser to procure more income to purchase emergency equipment for assisting Red Cross and other organizations in times of disaster. The money will be used to construct a trailer with a portable tower system. The unit will be built in such a way as to be expandable so that later a generator, radio equipment, and a simplex repeater can be added. The tower could also be used for ARC assisted events such as the March of Dimes and the ScareCrow Run.

Ed, N4VHA made the motion that a Bar-B-Q Fund-raiser be conducted on Saturday, December 2 for the purpose of purchasing equipment for assisting ARES, Red Cross and other organizations. The first goal is to purchase equipment for a mobile trailer and tower unit that is expandable. ARC club funds will be used to purchase all supplies for the event. Bar-B-Q, cole slaw, apples, chips, coffee, hot chocolate, and sodas will be served. Bar-B-Q plates will cost \$10.00.

Bob Herrin, KE4JLL, seconded the motion. The motion passed.

The second point of discussion concerned the purchase and approval to install a freestanding tower at the ARC shack. After several minutes of discussion, James, KF4AQO, made the motion that further discussion concerning be discontinued until a meeting with Richard Rosser is completed. Bob Herrin, KE4JLL, seconded the motion. The motion passed.

Ed, N4VHA and Ed, N4ZRA, will schedule an appointment with Richard Rosser (Athens-Clarke County Emergency Management) as soon as possible.

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Committees

New Appointments

(Submitted by Ed Rollo, N4ZRA)

As a Special Service Club, we are required to have a Technical Specialist that assists in the continuing education of members in the technical aspects of Amateur Radio. This is to ensure that the club members are technically competent and comfortable with modern radio-electronics technology. In order to meet this need I am assigning myself to this position for next year. This position in the ARC was originally entitled the Activities and Education Chairman and was filled by James Daniels, AE4HS, before his move to Virginia.

The duties of the Technical Specialist are as follows:

1. Publish at least every other month an article concerning technical aspects, product reviews, or other educational information.
2. Work in conjunction with the Vice-President and Membership Chairman to ensure that quality technical programs are scheduled for monthly meetings and other activities.
3. Plan social and recreational activities that provide educational training opportunities. Examples would be hiking or camping QRP trips and foxhunts.

Another position requirement of the Special Service Club is the Official Emergency Station appointment. This position closely corresponds to our Simulated Emergency Test Chair. For simplicity and consistency this position will now be the Official Emergency Station Chair.

Since Ed Fuqua, N4VHA, fits this description as the ARES Clarke County Emergency Coordinator, he has agreed to take this position.

The duties of this position are as follows:

1. Provide educational instruction concerning operating skill at club meetings and in the club newsletter.
2. Work closely with ARES.
3. Work with the Red Cross Liaisons and the Executive Committee to develop Simulated Emergency Tests.
4. Emergency Training Exercises will be developed to:
 - a. Find out the strengths and weaknesses of the Athens Radio Club concerning emergency communications.
 - b. Provide public demonstrations to served agencies, such as Red Cross, and the value of Amateur Radio to the public.
 - c. To help Radio Amateurs gain experience in communications using standard procedures and a variety of modes under simulated emergency conditions.



Event Reports

Report for the Scarecrow Run and the Jamboree on the Air (Submitted by Ed Fuqua, N4VHA)

Despite the fact that there was no football game on Saturday, October 21st, the Athens Radio Club had a busy day of activities. Saturday was a good day for making a public appearance and presenting our hobby. We started out the day meeting at Aunt Gail's Restaurant in Watkinsville for breakfast at 6:30 A.M. Other members of the ARC met at the regular Saturday A.M. breakfast spot, The Biscuit Barn, on U.S. 29 North, across from the Athens Technical College.

We had an enjoyable 'pre-event breakfast' and then headed off to man our posts for the Scarecrow Run. Those who assisted were:

Bob Herrin, KE4JLL (ARC/ARES Public Service Coordinator)
James Reeves, KF4AQO (ARC/ARES Assistant Emergency Coordinator), and his son
David McElhannon, KE4EOI
Edward Roller, N4ZRA - ARC President and ARES AEC
Kate Rollor, KG4EYK

James Geeter, KG4CWA
Edwin Fuqua, N4VHA - EC Athens-Clarke County Georgia
Jack Shrum, K4AHN - ARC Treasurer

James Geeter, KG4CWA, provided support despite the fact that he had worked all night at the Athens Airport for the National Weather Service.

The first event we worked was the Scarecrow Race. This event is conducted at 8:00 AM during the early hours of the annual Oconee County Fall Festival. It includes a 5K, the main event, a 2K for the kids, and a Fun Walk that included a number of State Representatives and other candidates.

We worked very closely with the Oconee County Sheriff's Department and with Sheriff Scott Berry. I was pleased with the support from the Amateurs and the sincere "thank you" we got from the Sheriff and all the Deputies that worked the event.

Bob, KE4JLL, served as Net Control Operator and did a great job laying out positions and conducting a communications test. I was very impressed with his organization, having maps and being familiar with the organizers of the event. His candor while in operation of the Net displayed his experience and ability to excel in a serious situation. We are thankful for Bob and his interest and dedication to our hobby.

In preparation for next year I am going to invest some time and hopefully gain support of the Sheriff's Department of Oconee County to continue our service as 'Health and Welfare' communicators to include our service for the rest of the day during the Fall Festival activities. We are also going to plan on having a special event station set up which could first act as a net control station and later on as an introduction to Amateur Radio to those who attend the festival. We are also planning to have a fund-raiser BBQ, which is quickly becoming a regular activity for the club and ARES members. Apparently, BBQs have the potential to make more money and serve as a better Public awareness event than a Hamfest for this area. The festival is the place to be because it's a big event for the area with traffic and parking is at a maximum for the area, making it a good place for a public demonstration.

After the run was over we got our equipment and packed for the Jamboree on the Air (JOTA) at Sandy Creek Park. We started setting up the station around noon and we were on the air by 12:45 PM. Bob, KE4JLL, and Ed, N4ZRA, launched lead weights through the air until they had enough rope up to pull the antenna to an acceptable height. Jerry Mount, KC4JRL, also an ARC/ARES member participated in the JOTA. He did a great job of encouraging the scouts to get on the air and instructing them in what to say. His mode of operation was excellent and we continued to use his outline during the rest of the day for the JOTA. We stayed at the park until after 6:00 P.M. and would have stayed longer except we were running out of steam. We should have made better plans for the JOTA and had some operators to continue the event until TAPS, but we just felt like we had done all we could for the day. We do feel that we produced some interest, though. We talked to at least two teens, and

two adults that we feel will contact us. We also made a good long-term association commitment with the BSA Troop 333 who also meet on Tuesday nights and are only about a mile away from the ARC shack. We talked about getting together to show the boys and girls what Amateur Radio is all about. That left us feeling like we at least invested our time for something. Next year is the big campout, about 3000 scouts will be there and we need to be better prepared. I hope the Fall Festival and the Campout are not on the same day.

The Sunday night 2-meter ARES Net has also been very good, too, thanks to AEC James Reeves, KF4AQO, Net Control, and the comments from Ed Rollor, N4ZRA, and the rest.

Thanks,
Edwin Fuqua, N4VHA@arrl.net EC Athens-Clarke County Georgia

The Georgia Simulated Emergency Test
(Submitted by Ed Rollor, N4ZRA)

On October 7th at 8:34 PM, Ed Fuqua, N4VHA, Emergency Coordinator for Clarke County, forwarded a test advisory concerning the simulated Hurricane "Sandy" to the arc-announce listserver. Ed the ARES Emergency Coordinator for the Athens-Clarke County area, was preparing the Athens Radio Club to participate in the Georgia statewide Simulated Emergency Test (SET). The purpose of the exercise was to work with Red Cross in passing emergency traffic concerning shelters and supplies.

As the "storm" progressed inland, Ed started the 40-meter net on 14.275 MHz while Steve Strong, KS4EL, started another HF Net on 3.975 MHz. At 8:30 AM James Reeves began the Athens 2-meter ARES net and eventually turned the net over to James Geeter, KG4CWA. (The Athens Radio Club ARES Net had 11 check-ins). Meanwhile, Ed Rollor, N4ZRA, headed over to the East Georgia Chapter of the American Red Cross for a previous scheduled meeting. Unfortunately, the meeting had been canceled and rescheduled for a future Saturday (see Red Cross Meeting article in this Emitter). During this time requests were coming in from Red Cross units in Dallas and Canton requesting needed supplies such as blankets and cots. N4VHA asked KG4CWA to contact N4ZRA and obtain information concerning available Red Cross equipment and shelters that were open. Since the meeting with Red Cross had been canceled, N4ZRA generated a test message to respond to the incoming requests. This message like all other messages in the SET were sent using the ARRL Radiogram.

During the next day Sunday Georgia ARES Net Lowry Rouse, KM4Z, State Section Leader stated that he was proud of the Georgia ARES members. He reported that between 80 and 90 amateurs had checked into the HF nets and thirty-eight radiograms were relayed. Along with thanking Ed, N4VHA, and Steve, KS4EL, for operating as net controls he also thanked Mike Hull, KD4DLT, Automatic Position Reporting System coordinator (APRS) and Charles Pennington, K4GK, relay station for GEMA on 75 meters. Lowry also took the time to point out some problems observed during the SET. The first problem was the speed at which the Radiogram messages were read. Other

problems were abbreviating words and difficulty in handling number groups. Lowry suggested that message handling using the ARRL Radiogram be practiced on a local level. (Ed, N4VHA, James, KF4AQO, and Ed, N4ZRA, are planning to design some messages handling exercises during the ARC's Sunday night 2-meter ARES Net.)

Later in an e-mail to the Georgia ARES Listserver, Lowry stated that the GEMA communications supervisor Dan Brown was very pleased with what he observed last Saturday. Dan was present, listening, and asking questions about our operation. Mike, KD4DLT, explained the APRS mode of communicating to him. After the SET was over, Dan talked with Lowry and 2 other ARES members in depth about how he could see the benefit of Amateur Radio in emergency situations. Dan also asked Lowry to get bids on a High Frequency (HF) radio and antenna to go into the Mobile Communications Van (MCV). ARES has a Kenwood TM-261 2-meter radio in the MCV now. Along with the HF radio, equipment to assemble an APRS station was to be included. If they approve the expense, ARES will have communication capabilities from 80 meters through 440 MHz and including APRS.

During the next SET, Lowry plans on utilizing this MCV unit. Of course the time schedule will need to be arranged with GEMA. The scenario would be to send the MCV out to a county several miles from Atlanta. This will demonstrate how using Amateur Radio in the MCV to communicate back to Atlanta Headquarters' can be a great benefit to GEMA. This SET may come before next October too. Since ARES can conduct SET's at anytime we just may have another smaller version in the next few months.

Lowry also urged Emergency Coordinators to fill out the ARRL SET forms. He pointed out that we desperately need to have more of a showing in the July issue of QST magazine. July is the month when SET results are published. Lowry stated that without documented evidence such as these reports, the ARRL has nothing to show the "Powers & Forces" that are trying to take Amateur Radio frequencies away from us. Providing information on all our public service time goes a long way in continually proving Amateur Radio's benefits to the everyday public. They can show thousands of documented hours spent providing services to organizations and emergency relief agencies. It proves that Ham operators can be of public service and not just out for their own fun and entertainment.



Announcements

Election Procedures for November 4, 2000 Meeting
(Submitted by Ed Rollor, N4ZRA)

The following Sections are from the Athens Radio Club by-laws. Please take the time to read these sections so that we will all be prepared for the election of new officers.

Section 4 - Officers

- 4.A. The officers of this Club shall be the following: six Executive Committee Representatives, a President, a Vice-President/Activities Manager, a Treasurer, a Secretary, a Public Information Officer, and a Repeater Trustee.**
- 4.B. All officers of this club shall be licensed amateurs at the time of their election and for the term of office.**
- 4.C. Regular elections shall be held at the regular November meeting, and they shall be held in the following order: President, Vice-President/Activities Manager, Treasurer, Secretary, Executive Committee members, Repeater Trustee (when required), and Public Information Officer. Nominations shall be taken from the floor and the winner of each election shall be determined by ballot; the nominee with the highest vote count shall be elected.**
- 4.D. A Repeater Trustee shall be elected each five-years and his term shall run consecutively with the club station license.**
- 4.E. The term of office for all officers shall begin January 1 immediately following their election, or as soon thereafter as possible, and shall end December 31 of the term year or as soon thereafter as possible and as successors may be qualified and elected. Officers elected at special elections shall hold their office until December 31 of the same year in which they are elected or as soon thereafter as their successor may be qualified and elected. The Repeater Trustee serves a five-year term, Executive Committee Representatives three-year terms, and all other officers' one-year terms, although any officer may be re-elected for any number of succeeding terms.**
- 4.F. An office may be declared vacant for any reason by a majority vote of the Club membership.**

Section 5 - Duties of Officers

- 5.A. The Executive Committee shall consist of the elected Club officers plus six members at large selected by the members on a rotating basis such that two Executive Committee members are elected each year at the time of regular elections. It shall meet quarterly during the second week of the month prior to the quarter. Seven votes shall be a quorum, and no less than seven votes are required to pass any item of business. It shall be the duty of this committee to decide all club business issues except dues and elections of officers, to plan Club affairs, and to act in the interest of the Club on all matters except the amount of dues and election of officers.**
- 5.B. The President shall preside at all meetings of the Club and conduct the same according to the rules adopted; he shall enforce due observance of the Charter and the by-laws; he shall decide all questions of order, sign all orders and official documents that are adopted by the Club and Executive Committee, and none other; he shall be ex officio a member of all committees; he shall perform all contemporary duties pertaining to the office of President.**
- 5.C. The Vice-President/Activities Manager shall assume all the duties of the President in the absence of the President and shall be ex officio a member of all committees; he shall be in charge of all official activities of the club and shall appoint such assistants as may be necessary to aid him in specific branches of**

- activity; he shall aid the ARRL Emergency Coordinator to the best of his ability and shall direct club emergency activities in case of disaster.
- 5.D. The Treasurer shall receive and receipt all moneys paid to the Club; he shall keep an accurate account of all moneys received and expended; he shall pay no bills without proper authorization by the Club or its officers constituting a business committee; he shall give a report at each regular meeting of the income and outgo of Club funds for the past month and shall give a report of the financial status of the club at the end of each third month; he shall, at the end of his term, turn over everything in his possession belonging to the Club to his successor.
- 5.E. The Secretary shall keep a record of the proceedings of all meetings and shall thank in writing all guest speakers and such organizations which obligate the Club by their favors; he shall, at the end of his term, turn over everything in his possession belonging to the Club to his successor.
- 5.F. The Public Information Officer shall be responsible for the publication of the Club Bulletin and shall appoint a bulletin staff of qualified members to insure publication; he shall make use of all appropriate means to publicize the Club, its members, and its activities; he shall maintain a record of all Club activity and publicity, including newspaper items, the Club Bulletin, and other such materials as shall provide a record for future members of the Club.
- 5.G. The Repeater Trustee shall be in complete control of and be responsible for the Club station; when possible, the Trustee shall hold an Extra class license or as high a class of license as is possible. If for any reason the Trustee should vacate his office, it will be his successor's responsibility to notify the F.C.C. and renew such licenses as required.

Section 6 - Appointments

- 6.A. The President or the Executive Committee shall have the power to appoint such committees as deemed advisable for the welfare of the Club, and the Executive Committee shall have the power to dissolve such committees at any time.
- 6.B. At any time the need is recognized, the President shall appoint a broadcast interference committee consisting of a chairman and as many members as he deems necessary. It shall be the duty of this committee to give assistance to Club members who request technical advice and physical aid in reducing their particular broadcast interference. It shall be the further duty of this committee to call on broadcast listeners troubled with interference from a Club member station to explain likely causes of the trouble to the broadcast listener and to take whatever steps the committee considers necessary to aid in clearing up the trouble.

New Labels for Old QST's

(Submitted by Ed Rollor, N4ZRA)

Jack Shrum, K4AHN, is making new labels for the ARC's old QST magazines. Based on a suggestion by Roger Wines, W5WIA, in the October 2000 QST, the ARC is making labels to advertise Amateur Radio and the Athens Radio Club. After the labels have been attached ARC members can take newly labeled QST's to various businesses and ask for

permission to leave them in customer waiting areas. The article suggests leaving them at doctors' offices, auto repair shops, and barber beauty shops.

The label will state:

"This publication was placed here by the Athens Radio Club. For more information please contact:

Ed Rollor, N4ZRA@arrl.net, (706)769-7256, or

Ed Fuqua, N4VHA@arrl.net, (706)354-1727, or

See our website at <http://www.AthensRadioClub.org>"

The labels and magazines should be available at the next club meeting.

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Calendar

Nov. 4 – Alford Memorial Radio Club Hamfest in Lawrenceville, Ga.

Nov. 7 – ARC meeting 7:30 pm – Election of club officials
grill open at 6:00 pm

Dec. 2 – Sleigh Bell Run

ARC Fund-Raiser

National Weather Service ARRL Special Event

Dec. 4 – VE Testing Session at ARC shack

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Red Cross Updates

Red Cross Meeting

(Submitted by Ed Rollor, N4ZRA)

As the ARC Red Cross liaison, I was invited to attend the Damage Assessment Team meeting on October 21st. The following details were presented:

1. The Sleigh Bell Run flyers were handed out and assistance from the ARC for communications was requested.
2. The van is now setup for limited canteen use. The van has already been used to assist in a truck accident. The truck, carrying fertilizer, blasting caps, and blasting boosters turned over and burned. From 6:30 AM to 4:30 PM the Red Cross van provided canteen supplies to the emergency workers.
3. The new Disaster Services Director, Wayne Webburn, was introduced.
4. Sherry Harper showed committee members the new "Masters of Disaster" education work kit which is described as "ready-to-go lesson plans for integrating disaster preparedness and safety into standard academic classes". The kits cost approximately \$42.00 and are available for different age groups. K-2nd Grade, 3rd-5th Grade and

6th-8th Grade.

5. Sandra Mauldin announced that there would be a Curriculum Fair at the Oconee County Middle School on Tuesday, November 14, from 5:00 PM to 7:00 PM. The Red Cross will have a booth setup at the fair, and the Athens Radio Club is welcome to take part.
6. Ed Rollor, N4ZRA, announced that 3 articles have been submitted to the East Georgia Red Cross for the Newsletter. The articles serve 2 purposes: 1) to encourage Red Cross workers to consider getting their amateur radio license, and 2) to demonstrate that the Athens Radio Club and the Amateur Radio Emergency Service are conducting Simulated Emergency Tests to prepare for future work with the Red Cross. The Georgia SET and the ARC's involvement was pointed out. The ARC Fund-raiser planned for December 2 was also mentioned. Steve Stringham and Henry Mauldin recommended that Red Cross volunteers support the ARC in their endeavors. Henry asked the ARC to update the ARC/Red Cross response list.

Articles submitted to the East Georgia Chapter American Red Cross
(Submitted by Ed Rollor, N4ZRA)

In order to increase our public awareness for the assistance the Athens Radio Club provides to the Red Cross, three articles have been submitted for their next Newsletter. These 3 articles focus on:

1. The October Georgia Simulated Emergency Test and its relationship to the Red Cross services (Simulated Emergency Test Prepares Hams To Work With Red Cross)
2. The Athens Radio Club Fund-raiser (Fund-raiser for the Athens Radio Club for Emergency Equipment), and
3. An article to encourage Red Cross volunteers to get their Amateur Radio License (Amateur Radio and the American Red Cross).

These articles are included below in this Emitter as a matter of record of our attempt to improve the working relationship between the Athens Radio Club and the Red Cross.

Simulated Emergency Test Prepares Hams To Work With Red Cross
(Submitted by Ed Rollor, N4ZRA)

On Saturday, October 7th the Athens Radio Club participated in a state wide Simulated Emergency Test (SET). The purpose of the SET was to gain experience in working with the Red Cross in passing communications concerning weather and shelter information. This SET revolved around a simulated hurricane that hit the Savannah area and then moved into north Georgia causing massive flooding and home evacuations.

The Athens Radio Club took an active part in this exercise. The Clarke County Amateur Radio Emergency Service Emergency Coordinator, Ed Fuqua, N4VHA, was the net control for one of the two statewide high frequency nets being operated during this

exercise. The Athens Radio Club activated the local ARES net at 8:25 AM Saturday morning on the club's 2-meter repeater. Simulated emergency test messages were passed from the Athens Radio Club members to the statewide net to be sent to other Red Cross chapters, the Georgia Emergency Management Agency (GEMA) and other organizations.

During the exercise, shelters in Dallas and Canton requested blankets and cots from the East Georgia Chapter of Red Cross. A simulated message was generated in response: "Test Message Banks County has 2 shelters open for 200 evacuees X Clarke County has 10 shelters open for 1050 evacuees X East Georgia Red Cross does not have extra cots and blankets for Dallas and Canton X Test Message". Messages were passed using the American Radio Relay League Radiogram.

Fund-raiser for the Athens Radio Club for Emergency Equipment
(Submitted by Ed Rollor, N4ZRA)

Ever tried to be two places at once? Well, the Athens Radio Club will be doing just that on Saturday December 2, 2000. On that Saturday the Athens Radio Club will assist the East Georgia Chapter of the American Red Cross with the annual Sleigh Bell Run at Bishop Park and at the same time be conducting a fund-raiser at the Super Center WalMart on the Lexington Hwy. The Net Control station for the race will be operated from the fund-raiser site at the WalMart shopping center so that the shoppers will be able to hear the communications for the Sleigh Bell Run.

The Athens Radio Club Bar-B-Q Fund-raiser is being conducted for the purpose of purchasing equipment for assisting the Amateur Radio Emergency Service, Red Cross and other emergency organizations. Our goal is to raise funds to purchase equipment for a mobile trailer and tower unit. Bar-B-Q, cole slaw, apples, chips, coffee, hot chocolate, and sodas will be served. Bar-B-Q plates will cost \$10.00.

Amateur Radio and the American Red Cross
(Submitted by Ed Rollor, N4ZRA)

Over the past several years' disaster relief organizations have re-evaluated their services and they all have given special attention to the problem of communications. Fortunately for these organizations there already exists a public service communication group that has been an important part of emergency communications for many years: Amateur Radio. Amateur Radio Operators (AROs) have passed communication traffic and assisted in emergency communications during floods, tornadoes, forest fires, earthquakes and many other disasters. AROs, or "hams", have found themselves in big demand in this day and age for emergency communication and other events. For example, Athens Radio Club (ARC) members work communications for road races (the annual Sleigh Bell Run for example), various non-profit fund-raisers, and UGA Football Game Red Cross First Aid Communications. The ARC runs Skywarn nets during dangerous weather conditions and reports important information to the National Weather Service. Simulated Emergency Tests are run twice a year, to keep club members on the alert and well trained. During emergencies you find ARC members working with the Amateur Radio Emergency

Service, Georgia Baptist Disaster Relief, the East Georgia Chapter of the American Red Cross and other groups.

As you can see hams are quite busy and have accepted many commitments to serving their community. This poses an interesting problem for the Athens Radio Club. Although there are many hams in the 12 county areas served by the East Georgia Chapter of the American Red Cross, they are already quite busy with commitments to many organizations. This is a serious problem, which needs to be resolved. Members of the Athens Radio Club are concerned that at the time of an emergency we will not have enough communicators to help Red Cross in their Damage Assessment endeavors because of the heavy demands required by the other organizations that we work with.

So what is the solution to this dilemma? Actually, the answer is simple: we need Amateur Radio Operators who are devoted to Red Cross service, specifically Damage Assessment. We need people who are trained in Damage Assessment to take the time to get their Amateur Radio license. The entry level Technician Class can play a valuable part in gathering and quickly relaying important Damage Assessment data to decision makers.

By having more Red Cross volunteers involved in Amateur Radio:

1. There will be an increase in the Damage Assessment data transfer.
2. There will be a communication capability in place when the others may be unavailable. (Cell towers are damaged in some emergencies and many times communication lines are tied up).
3. There will be a solid communication network in place between Red Cross field operations, headquarters, and shelters.

If you are a Red Cross volunteer, please consider the opportunity you have to increase your ability to assist the East Georgia Chapter of the American Red Cross by joining a group of people who have made emergency communications a part of their hobby and lives.

For more information about Amateur Radio please contact:

Ed Rollor, President, Athens Radio Club, (706)7697256 or n4zra@arrl.net

Ed Fuqua, Emergency Coordinator for the Clarke County Amateur Radio Emergency Services, n4cha@arrl.net



Ham News

Riley Hollingsworth at Alford Amateur Radio Club Hamfest.

To all ARRL members. This weekend is the Ham radio and Computer Expo sponsored by the Alford Amateur Radio Club at the Gwinnett County Fairgrounds. Sat 9a-5p and Sun 9a-3p. Featured is a talk by Riley Hollingsworth of the FCC Enforcement Bureau. Additionally I have been asked to make everyone aware that Riley will be on the air in two weeks.

See the information below.
73 Sandy, W4RU, SM-Ga.

Riley Hollingsworth to answer questions on radio

Please pass the word on that Riley Hollingsworth will address amateurs on 11/15/00 at 8 PM on 3990 kHz.

The Sun Belt Service Net will be the host with AA2FU- George Starks of Cadiz, KY as moderator.

The format calls for Riley to talk about his work as the FCC Enforcement officer. Following those words he has agreed to answer a series of questions. My arrangement with Riley calls for compiling questions to be submitted via e-mail to either AA2FU at [mailto: gwsx@yahoo.com](mailto:gwsx@yahoo.com) or me at w8cxu@worldshare.net by 11/12/00.

I'll appreciate your cooperation in spreading the info to parties whom you think might be interested.

Please advise of any matters that may need further explanation.

73 de W8CXU
Frank
w8cxu@worldshare.net

National Weather Service/ARRL Special Event

Mark your calendars! On December 2, 2000, the National Weather Service (NWS) and the ARRL will co-sponsor an on-the-air special event from 0000 UTC to 2400 (Friday night through Saturday).

There are four main objectives for the National Weather Service Special Event (NWSSE): Most importantly, the special event stations will commemorate the contributions that Amateur Radio operators make during times of threatening weather. Second, it would create an opportunity for NWS personnel to meet Amateur Radio operators, and it would also give Amateur Radio operators an opportunity to examine NWS operations. Third, it will encourage NWS personnel to actually get on the radio (under the supervision of a control operator) and, hopefully, encourage them to acquire an operating license. Fourth, it will be fun! The NWSSE Web site has complete operating instructions, a list of participating NWS stations and QSL information.

Log onto <http://www.nws.noaa.gov/event2000/> for complete details.

Operating Event Guidelines

The objective is for Amateur Radio operators at NWS sites to work as many other amateur stations as possible. If you would like to set up a special event at a National Weather Service office, it will be the responsibility of the local Amateur Radio club or group to provide equipment and configure your operating area with appropriate antennas.

Please coordinate with your local NWS office, and register the station with Scott Mentzer, KB0WPY, at scott.mentzer@noaa.gov by November 15. The NWS Special Event will take place in the General and/or Technician part of the bands. VHF operations are encouraged and repeater contacts are allowed. Most contacts will occur on the bands between 10 meters to 80 meters. Entities that utilize specific frequencies on a routine basis (e.g., National Hurricane Center) are encouraged to use those frequencies during the event. The actual frequency from which a NWSSE station operates is left to the local operator's discretion. (The ARRL 160 Meter contest will run during the NWS Special Event. Therefore, special event stations will not operate on that band.) Although phone will be the primary operating mode, event stations will be encouraged to use the following digital modes: CW, PSK-31, APRs, and RTTY. NWS Special Event operators will append "NWS" to the end of their call signs (e.g., W0A/NWS) when using digital modes. The QSO exchange will include call sign, signal report, location, and a one or two-word description of the weather occurring at your site ("sunny," "partly cloudy," "windy," etc.).

Certificate with Endorsements

The National Weather Service Special Event will award a certificate with endorsements. An endorsement is basically a sticker that is placed on the certificate if certain goals are reached. To obtain your certificate, create a handwritten log of NWS stations worked and indicate the endorsements you are applying for. You may also link to the certificate endorsement log at this address:

<http://www.nws.noaa.gov/event2000/SpecialEvent2000.PDF>. Enclose a self-addressed stamped envelope, and mail both items to:

National Weather Service Special Event
920 Armory Road
Goodland, KS 67735

An up-to-date list of the endorsements and qualifying criteria may be found at this particular page on the Special Event Web Site:

<http://www.nws.noaa.gov/event2000/EventCertificates.htm>.

What About QSL Cards?

In addition to the event certificate, a number of individual stations are offering QSL cards. A list of those offices accepting QSL cards can be found on the NWSSE Web site by clicking "QSL Card Info" on the menu.

NWS contact: Scott Mentzer, KB0WPY, scott.mentzer@noaa.gov.

Telephone: 785-899-2360. ARRL contact: Steve Ewald, WV1X, sewald@arrl.org.

Telephone: 860-594-0200.



Excerpts from ARRL Newsletter

PHASE 3D LAUNCH CAMPAIGN UNDER WAY

The launch campaign for the next-generation Amateur Radio Phase 3D satellite has begun at the European Spaceport in Kourou, French Guiana, where the satellite has been in storage since spring. Phase 3D is tentatively set to go into space aboard an Ariane 5 rocket no earlier than November 4. A specific launch date has not yet been announced.

"P3D is doing just fine!" AMSAT-NA President Keith Baker, KB1SF, enthused this week. "Things are going well, and there are no significant issues." Baker said the team's primary task is to coordinate with the launch agency, Arianespace.

AMSAT and Phase 3D officials were encouraged by the September 14 Ariane 5 launch that they'd been keeping an eye on as a bellwether for the next-in-line Phase 3D launch. The Ariane 5 successfully delivered a pair of communications satellites into the desired geostationary transfer orbit after what was called "a spectacular launch" from the European Spaceport.

A launch contract accepting Phase 3D as a payload for the first suitable Ariane 5 launch vehicle was signed last fall. More information about Phase 3D is on the AMSAT-NA Web site, <http://www.amsat.org/>.

PHASE 3D SET FOR HALLOWEEN LAUNCH

The next-generation Phase 3D Amateur Radio satellite is set for launch on Halloween! The launch agency Arianespace said that in addition to Phase 3D, an Ariane 5 rocket would attempt to orbit the PAS 1R communications satellite and two other payloads, STRV 1C and STRV 1D, on Tuesday, October 31. The launch will take place at the European Spaceport in Kourou, French Guiana.

AMSAT-Germany Executive Vice President Peter Guelzow, DB2OS, who's heading up the launch campaign, was a bit more tentative about the launch date. He called October 31 "the start of the launch window" and said it was the earliest date on which the launch could take place.

AMSAT officials were encouraged by the successful September 14 Ariane 5 launch that placed two communication satellites in orbit. A launch using an older generation Ariane-4 rocket is scheduled for October 7.

Guelzow reports launch preparations for the October 31 Ariane 507 Phase 3D flight officially got under way September 18 in Kourou and are proceeding "on target." Guelzow is pinch hitting for Phase 3D Project Leader Karl Meinzer, DJ4ZC, who was unable to make the trip.

AMSAT News Service says the RUDAK computer team, the RF team and members of the electronics team from AMSAT-NA already have completed their work and returned home. Electronics team members from Europe this week were wrapping up their tasks and preparing to leave. Five of the six bays around the satellite's circumference have been secured for the final time; the sixth bay has been prepared to load fuel. Thermal blanket additions have also been completed. Final tests have been made on several detectors--such as the sun sensor--and the solar cells were being mounted on the satellite and will be connected to the battery chargers.

Once everything is ready, the rocket and the satellite payload packages it will carry will be integrated in the Spaceport's Final Assembly Building.

Guelzow reminded operators planning to use Phase 3D after launch that it could be a few months after launch before Phase 3D is ready for routine operation. The actual time depends on several factors including orbital parameters and the work needed to nudge P3D into its final elliptical orbit. Guelzow said that satellite operators worldwide "can rest assured that every effort will be made to initiate operations at the first possible opportunity consistent with flight operations."

The launch team has established a Web site that includes photographs of the team preparing the satellite. It's at <http://www.amsat-dl.org/launch/>. For more information about Phase 3D, visit the AMSAT-NA Web site, <http://www.amsat.org/>.

ARRL ADVISES CAUTION IN DEPLOYING ULTRA-WIDEBAND

The ARRL has advised the FCC to put its ultra-wideband—or UWB—technology proceeding on hold until more evidence is available on UWB's interference impact. Saying the technology could have enormous benefits for public safety, consumers and businesses, the FCC last May proposed amending its Part 15 rules to permit the operation of ultra-wideband on an unlicensed basis. The League filed comments September 12 in the Commission proceeding, ET Docket 98-153.

UWB proponents claim the devices are capable of operating on spectrum that's already occupied by existing radio services without causing interference. The FCC says UWB deployment could permit scarce spectrum resources to be used more efficiently.

The ARRL said that while it does not object "as a general principle" to authorizing UWB devices under Part 15, "UWB devices cannot be authorized on a blanket basis at this point without making assumptions which could very well be erroneous, and with potentially disastrous results for licensed radio services." The League said the UWB proceeding should be put on hold until test results are available on the impact of UWB and a further round of comments sought. Specific rules need to take into account "empirical evidence of interference potential from UWB devices," the ARRL said, and it questioned why the proceeding was issued before test results and analyses were received.

The bulk of the League's comments focus on the potential for interference from UWB to Amateur Radio allocations. "Part of ARRL's reluctance is that some types of UWB operation will result in wideband noise across multiple amateur bands, something not likely to occur with most presently authorized Part 15 devices," the ARRL asserted. The League called upon the FCC to not authorize any UWB deployment below 2.5 GHz. The ARRL also asked the FCC not only to determine reasonable operating conditions for UWB devices but to also consider how it will address cases of harmful interference that may result from UWB deployment. And the ARRL said it wants the FCC to consider extending the protections it's considering for safety services—such as GPS—to the Amateur Service.

The League attached to its comments rough calculations of the interference potential of various possible UWB configurations. It also offered to contribute to further studies now underway under the auspices of the NTIA and the Department of Transportation.

"At this point, it is not reasonable to adopt rules for UWB devices," the ARRL concluded, "despite an apparent public interest in accommodating such devices." The ARRL's comments in the UWB proceeding are available at http://www.arrl.org/announce/regulatory/et98-153_index.html.

RECYCLED ICBM PUTS HAM SATELLITES INTO ORBIT

Three Amateur Radio satellites were propelled into space September 26 aboard a converted Soviet ballistic missile. The launch reportedly took place at 1005 UTC from the Baikonur Cosmodrome .

Now in low-Earth orbit are SaudiSat-1A and SaudiSat-1B and TiungSat-1. The satellites appear to be functioning and are being commissioned by ground controllers. The launch vehicle, a Dnepr 1 rocket, is based on the Soviet SS-18 "Satan" ICBM—a ballistic missile reworked for peaceful purposes.

The SaudiSats will be able to operate 9600 baud digital store-and-forward as well as analog FM repeater mode. The uplinks will be on VHF and the downlinks in UHF (Mode J). The downlink for SaudiSat-1A is 437.075 MHz; the downlink for SaudiSat-1B is 436.775 MHz. The uplinks will be published after the satellites have been checked out and commissioned.

Jim White, WDOE, reports that both SaudiSats have been turned on and are running the initial housekeeping task. He says the downlinks are only on when the satellite is over ground stations that are participating in the commissioning process.

TiungSat-1 is Malaysia's first microsatellite. For amateurs, it will offer FM and FSK (at 9.6, 38.4, and 76.8 kB) with uplinks at 144.46, 145.85, and 145.86 MHz and downlinks at 437.300, 437.325, 437.350, and 437.375 MHz. The satellite also carries land and weather imaging payloads.

Chris Jackson, G7UPN, reports TiungSat was activated from the 9M2MCS command station on September 27. "Excellent telemetry was received showing that the spacecraft was in good health," he said in a posting to the AMSAT reflector. Jackson said the spacecraft currently is transmitting telemetry on 437.325 MHz. The flight software was to be loaded this week. "With only one pass night and morning over Malaysia it will take some time to get everything running," he said.

TiungSat--named after the mynah bird native to Malaysia--was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd. of the UK. For more information, visit <http://www.ee.surrey.ac.uk/CSER/USAT/missions/tiungsat/team.htm> and http://www.yellowpages.com.my/tiungsat/tiung_main.htm.

The Dnepr 1 booster also launched a pair of Italian commercial satellites.--AMSAT News Service; Bruce Paige, KK5DO; Space.com; TiungSat

IARU MONITORS SEEK REPORTS ON UNLICENSED OPERATION

In an effort to better document the extent of unlicensed operation on Amateur Radio frequencies--particularly 10 meters--the International Amateur Radio Union Region 2 Monitoring System is surveying member societies about the extent of the problem. The ARRL is soliciting reports from US hams to supplement its response to the survey.

"At the peak of the sunspot cycle, CB-like operations become more and more apparent on the highest HF band," says Brennan Price, N4QX, administrator of the ARRL Monitoring System.

Price says that on September 28 alone, the ARRL received three reports of such activity on 10 meters. "John Hennessee, N1KB, and I took turns monitoring at headquarters station W1INF and noted 12 such stations in about 15 minutes of listening time--all using AM between 28.0 and 28.1 MHz," he reports.

ARRL Executive Vice President David Sumner, K1ZZ, said he believes the best short-term solution is for amateurs to get on the air and use their frequencies. "Illegal operation on 10 meters declines on a contest weekend," Sumner says. "If that volume of stations would operate more often, perhaps these intruders would look elsewhere for an open frequency."

REPUTED OLDEST US HAM, LEAGUE MEMBER BILL DEARING, W5QN, SK

The man believed to have been the oldest Amateur Radio operator in the US and the oldest member of ARRL has become a Silent Key. Wilbur "Bill" Dearing, W5QN, of Bonham, Texas, died September 20 at a Dallas hospital. He was 101. Dearing succumbed to complications resulting from a fall in which he broke his hip.

First authorized to operate a spark-gap transmitter by the US Department of Commerce in 1913 or 1914, Dearing remained an active amateur until the day of the accident that led to his death. He obtained his W5QN call sign in 1927, the year the Federal Radio Commission--the predecessor to the FCC--was established.

=>FCC TRIMS TUCKER FAMILY CALL SIGNS

Hoping to put an end to another club station call sign controversy, the FCC has reduced the overall number of call signs held by members of California's Tucker family from 41 to 22--including personal and club station call signs.

FCC Special Counsel for Amateur Radio Enforcement Riley Hollingsworth outlined the call sign allocation plan in a September 29 letter to the Tuckers' attorney. It's identical to what the Commission had proposed last November 3.

According to the FCC plan, family patriarch Roy Tucker, N6TK, would be allowed to keep three of seven club call signs granted November 4, 1996, and Kathryn Tucker, AA6TK, Kers Tucker, AA6KT, and Eric Tucker, AA6ET, each would be allowed to retain three of eight club call signs granted to each November 4, 1996. Nancy Tucker, W5NAN, would be permitted to retain the two club station call signs assigned to her January 9, 1998. All family members would retain their personal call signs as well.

Hollingsworth said the FCC plans to take back the subsequent grants of K6ANT to Roy Tucker and of WW6TXB and WX6XX to Kathryn Tucker. He said the FCC would let the family members retain the three earliest call signs granted, unless they specify three others.

"It games the system," Hollingsworth said of the practice of collecting multiple club station call signs, "and we're not going to let anyone game the system." He said club station call sign applications must be on behalf of bona fide clubs.

The FCC first inquired into the Tucker family's 36 club station call sign holdings in the summer of 1999, requesting that individual family members justify their need for the call signs. The Commission requested club meeting times and dates, proposed meeting times, and copies of minutes taken at club meetings within the previous three months.

The Tucker family has declined to provide membership information for each club or even the number of members of each club, Hollingsworth said. "The Tuckers also claimed to have organizational documents, but none were submitted with their response."

The Tuckers had proposed last fall to consolidate their club call signs in a manner that would result in a total of 27 rather than 36 club call signs granted to family members. Hollingsworth said, however, that the Tucker family's proposal "was unclear as to the club call signs that Roy and Kathryn Tucker sought to retain in their individual names and in their joint names." He said that the Commission received no clarification, despite

subsequent letters in May, July, August and September, so the FCC has imposed its own solution.

Hollingsworth said this week that the FCC continues to be interested in club call sign cases "where there is no legitimate interest in a club, but where they were applied for in bad faith, merely to acquire or hoard club call signs."

==>PHASE 3D LAUNCH DELAYED

AMSAT News Service reports the launch of the next-generation Phase 3D Amateur Radio satellite has been delayed until mid-November. The launch agency, Arianespace, had tentatively planned to launch Phase 3D and three other payloads on or about October 31 aboard an Ariane 5 rocket. A new tentative launch date for Ariane Flight 135 has not been announced.

AMSAT-DL Executive Vice President Peter Gülzow, DB2OS, has indicated to ANS that one of the payloads scheduled to travel into space with Phase 3D has not yet arrived at the European Spaceport in Kourou, French Guiana, but was due to be there "very shortly." Once on-site, the payload still must undergo a detailed launch preparation campaign similar to the one Phase 3D now is completing. In addition to Phase 3D, the Ariane 5 will attempt to orbit the PanAmSat PAS 1R communications satellite and two British Space Technology Research Vehicle microsattellites, STRV 1C and STRV 1D.

Gülzow says Phase 3D's fueling operations now are complete. Loading of ammonia was the last step in the fueling process—Phase 3D is only the world's second satellite to use ammonia in its fuel. The satellite also will carry dinitrogen tetroxide, an oxidizer, and monoethylhydrazine, a fuel. Loading each chemical fuel took approximately two days—the first to set up the operation and the second for the actual fueling.

Phase 3D team members already have checked out the RF, computer, electronic, and mechanical systems for the satellite before buttoning it up for the last time prior to launch. Phase 3D's solar cells were fitted and tested using high-intensity lights to verify electrical output and battery charging capabilities. In addition, the satellite was fitted into the support bearing structure—or SBS—that will cradle Phase 3D on its ride into space.

Phase 3D soon will be moved into the final assembly building at the European Spaceport, where the satellite will be mated to the Ariane 5 launch vehicle.

The new satellite, at more than 1400 pounds and nearly 20 feet across, will be the largest Amateur Radio payload ever put into space. Once in space, Phase 3D will be nudged by its onboard thrusters into an elliptical orbit that will put it at 4000 km (approximately 2485 miles) from Earth at its nearest point and 47,700 km (approximately 29,900 miles) at its farthest. The satellite, with an estimated ten-year lifespan, will provide Amateur Radio coverage over North America, Europe and the Far East on several bands from HF through microwave.

Gülzow has reminded satellite operators planning to use Phase 3D that it could be a few months after launch before the satellite is ready for general amateur use.

For more information, visit the AMSAT-NA Web site, <http://www.amsat.org>.

==>TWO HAMS ABOARD 100TH SHUTTLE MISSION

After delays due to bad weather, a possibly problematic retracting bolt, a sluggish valve and a halted countdown to remove a stray tool, the shuttle Discovery lifted off from Cape Canaveral the evening of October 11. The launch was the 100th of the space shuttle program.

Two Amateur Radio operators are aboard Discovery. They include Mission Commander Brian Duffy, N5WQW, and Mission Specialist Koichi Wakata, KC5ZTA, who will represent NASDA, the Japanese Space Agency. No Amateur Radio activity is scheduled for this mission, however. Others aboard Discovery will include Pilot Pam Melroy, and mission specialists Leroy Chiao, Bill McArthur, Jeff Wisoff, and Mike Lopez-Alegria.

Discovery is on the fifth shuttle construction mission to the International Space Station and the last before the arrival of the ISS Expedition 1 crew in early November. Two new segments of the ISS are in the shuttle's cargo bay—a new docking port for use by future shuttle missions and a nine-ton exterior framework.

Shuttle mission STS-92 had been scheduled to launch on October 5, but inclement weather, concerns over a retracting bolt assembly, and a faulty engine valve delayed the launch until this week. Then, with the crew aboard and the countdown running Wednesday, NASA personnel spotted a stray metal pin apparently left behind by a worker on a support strut between the orbiter and the shuttle's giant fuel tank.

Launch managers decided to halt the countdown at T-minus 20 minutes and roll the launch tower back into place to retrieve the pin. An investigation is under way to determine how it was left behind and not accounted for.

The ISS exterior framework--called the Z1 truss--will be attached to the expanding station. The Z1 will house gyroscopes and communications equipment that will provide future "balance" for the outpost as well as enhanced voice and television capability. A conical mating adapter called Pressurized Mating Adapter 3 will be attached, providing an additional shuttle docking port. During the 11-day mission, Wakata will use the shuttle's robotic arm to attach the framework and mating adapter to the station's Unity module.

Amateur Radio on the International Space Station initial station gear was delivered last month by the shuttle Atlantis. The equipment has been stowed aboard the ISS until the Expedition 1 crew of US astronaut Bill Shepherd, KD5GSL, and Russian Cosmonauts

Sergei Krikalev, U5MIR, and Yuri Gidzenko come aboard for a four-month stay. The Expedition 1 crew launch currently is targeted for October 30 from the Baikonur Cosmodrome in Kazakhstan.—from NASA news releases and press reports

==>FCC QUESTIONS POSSIBLE "CORPORATE RAIDERS" ON HAM BANDS

With complaints involving Amateur Radio licensees on the decline, FCC Special Counsel for Amateur Radio Enforcement Riley Hollingsworth has been focusing more on unlicensed activity. In a few recent cases, he's questioned businesses about transmissions monitored on amateur bands.

In late September, the FCC sent a Warning Notice to Friendly Tree Services of Orange, New Jersey, after members of the amateur community there monitored what appeared to be business-related communications on 2 meters. Citing "information before the Commission," Hollingsworth dropped Friendly Tree a line on September 29 to inquire about transmissions monitored on 144.085 MHz. Monitoring information provided to the FCC indicated that an apparently unlicensed station was conducting business on 2 meters using a "base station and at least four trucks." The amateurs made the connection with the tree service after overhearing directions to a particular street address given over the air. The amateurs drove to the address and spotted one of the company's trucks and a worker at the site.

Another Warning Notice went out in late September to Inland Materials Inc of Casselberry, Florida. That Notice cited information alleging that the company was transmitting on 438.537 MHz without a license. According to Hollingsworth, amateur reports indicated that one channel of the company's business radio system transmits on an amateur frequency, but he said it was unclear if this was by design or simply an error.

Hollingsworth has advised the two companies that unlicensed operation is a violation of federal law that could result in a fine of up to \$10,000 and jeopardize any FCC licenses the companies already hold. Hollingsworth requested both firms to contact him within 10 days to discuss the matter.

The FCC also notified AT&T Wireless PCS in late September to inquire about allegations that the PCS system's KNLF245 in Newport News, Virginia, may be causing harmful interference to the KA4VXR Amateur Radio repeater in nearby Hampton. The FCC requested that AT&T contact the repeater system's trustee to "explore a solution to the problem" and to advise the FCC of its findings.

The FCC is continuing to investigate allegations raised earlier this year that the Citipage Plus paging system in Las Vegas, Nevada, has been causing harmful interference to the N7OK repeater on 147.09 MHz.

==>ARRL HEADQUARTERS E-MAIL RESUSCITATED, RECOVERING

The ARRL Headquarters e-mail system appears to be on its way to a full

recovery. The system is again running--albeit sluggishly--and efforts continue to clear remaining problems.

The system went down over the Columbus Day weekend. Although some e-mail managed to trickle in and out of ARRL Headquarters during the week, the system was shut down to users for the better part of four days. ARRL Information Systems Department Manager Don Durand said that recovery utilities used in the wake of the crash apparently did the trick. E-mail service in and out of ARRL Headquarters was restarted at noon Thursday Eastern Time. Staff members were still catching up on their e-mail traffic by week's end.

Durand has emphasized that the problems with the Headquarters e-mail system have not affected the ARRL E-Mail Forwarding Service.

The e-mail system problems arose after a Headquarters staff member routinely set up his ARRL account to forward e-mail to his personal AOL e-mail account while he was out of town. When the staffer's AOL in basket became full and refused to accept new messages, however, e-mail began bouncing back to his ARRL account. At that point, the League's e-mail server attempted to send the bounced traffic back to AOL, creating a "feedback loop" that eventually led to the corruption of software on the League's e-mail server.

SOLAR UPDATE

We have now passed the autumnal equinox and are experiencing fall HF conditions. 10 and 12-meter operators should expect great propagation, at least when the K index as reported by WWV is three or less. As the northern hemisphere moves further from the summer season, 160 and 80 meters should improve with shorter days and less of the static commonly associated with summer.

We are surely at the peak of this solar cycle. Since there is so much daily variation in solar indices, we won't know until much later when the peak actually occurred, however. Solar watchers and HF radio aficionados wonder if during the final quarter the sun will give us some more activity, yielding a later peak.

Solar flux is expected to peak at 221 around October 18 and 19, and not dip below 200 until October 28. The next short term solar flux minimum is expected around November 5-7. Average solar flux predicted for the next 45 days is 191, which is a bit higher than the average for the first three quarters of this year.

IN BRIEF:

* New Jersey city says "Both hands on the wheel!" The Township Council of Marlboro, New Jersey, got the nod from the state Department of

Transportation to put signs up on all roads leading into the area that say Marlboro prohibits the use of cellular telephones while driving. Local law-enforcement officers say they will wait until the estimated 50 signs have been planted before they begin handing out warnings and tickets. New Jersey's State Senate will watch the Marlboro development before it introduces a statewide ban on talking while driving. While the ordinance apparently does not mention hands-free devices, it does say drivers who don't keep both hands on the wheel while talking could be fined up to \$250.--reported by the Asbury Park Press

* Brian Milesosky, N5ZGT, to edit Youth@HamRadio.Fun for AWE: The 1999 winner of the ARRL's prestigious Hiram Percy Maxim Award, Brian Milesosky, N5ZGT, of Albuquerque, New Mexico, is the editor of a new youth-oriented column in The ARRLWeb Extra on the ARRL's Members Only Web site. Look for Brian's debut column at http://www.arrl.org/members-only_extra/features/2000/09/20/1/. Brian, 20, is a senior in electrical engineering at the University of New Mexico and an active amateur. Share your ideas and suggestions for future columns with him at n5zgt@arrl.net.

* Another long-distance FRS rescue: An 11-year-old Marysville, Washington, girl helped rescue a stranded and injured hiker 100 miles away on September 24 when she picked up his call for help on her Family Radio Service UHF H-T. Mikayala Whitley was playing Sunday with the little transceiver outside her home in north of Seattle when she heard the call for help and responded. She was able to keep in contact with injured hiker Michael Wyant, 49, throughout the afternoon. The girl's parents called authorities, who launched a rescue with the youngster acting as a communication relay between the hiker and rescuers. Wyant was picked up by a helicopter later that afternoon, treated at a hospital and released. He also called to thank his radio rescuer. The FRS units--which operate in the 462-MHz range--have a typical range of a couple of miles. In June, two young Oregon brothers were credited with quick thinking after they intercepted a plea for help transmitted via an FRS UHF transceiver by some injured mountaineers more than 80 miles away. Those hikers also were rescued as a result. REACT International has suggested the adoption of FRS channel 1 (462.5625 MHz) with the CTCSS tone disabled as a national call channel. REACT says it came up with the idea after lost hikers in Southern California spent 40 minutes calling on 14 different FRS channels using 38 different tones. In that case, an 11-year-old boy, Kristofer Moore, heard the distress call on his FRS H-T while camping with his family.--news reports; REACT

* FCC puts a new face on ULS home page: The FCC has spiffed up the Universal Licensing System home page at <http://www.fcc.gov/wtb/uls>. But beyond the shiny, new facade--which simplifies and clarifies navigation and minimizes confusion--it's the same ULS we have come to know and love--or hate. Check it out!

* UK abolishes age restriction: After discussions with the Radio Society of Great Britain, the UK Radiocommunications Agency has to drop the age restriction to obtain a "full" Amateur Radio license. Previously, applicants had to be 14 years of age or over, or to

have held a Novice license for at least a year. Now, applicants who have passed the radio amateur examination and either the 5 WPM or 12 WPM Morse code test for a Class A/B or Class A license respectively, may apply for a full license.—RSGB

* Georgia Tech ARC celebrates milestone Georgia Tech ARC celebrates 90 years of operation October 7-8 weekend with a special event station. Hams—especially Georgia Tech alumni—are invited to work W4AQL on 40, 20, 15, and 10 meters. The Georgia Tech club got its start in 1910 when several senior class students at the then Georgia Institute of Technology began playing around with wireless. The government eventually assigned the call sign 4XG to these experimenters (4 for the call district, X for experimental and G for Georgia) until the outbreak of World War I, when all stations were shut down. Details can be found at the W4AQL Web site, <http://www.w4aql.com>

* New satellites being commissioned. Ground controllers are commissioning the new Saudi and Malaysian Amateur Radio satellites launched September 26 from Kazakhstan. Over the past weekend, controllers have been detumbling the Malaysian TIUNGSAT-1 satellite to prepare it for nadir stabilization. The first payload was activated September 29. The CEDEX payload for gathering radiation data is very similar to the CEDEX developed for Phase 3D—the TiungSat CEDEX is the next revision. Once the attitude is stabilized, further payload testing will be completed. The downlink frequency is 437.325 MHz. A number of reports have been received from Amateur Radio operators who copied signals from TIUNGSAT-1 shortly after launch. The satellite was heard transmitting telemetry at 9600 baud using FSK and the AX.25 protocol. For more information on TiungSat-1, visit the Malaysian Microsatellite page at http://www.yellowpages.com.my/tiungsat/tiung_main.htm.

Both SAUDISAT-1A and 1B have been turned on and are running their initial housekeeping tasks. Downlinks are on only when the spacecraft are over ground stations participating in the commissioning process. Downlinks are: SAUDISAT-1A, 436.775 MHz; SAUDISAT-1B, 437.075 MHz and 9600 baud FSK transmissions are currently taking place on these frequencies. Reception reports are invited to Jim White, WD0E, wd0e@amsat.org. —Chris Jackson, G4UPN and Jim White, WD0E, via SpaceNews

* DARA accepting scholarship applications The Dayton Amateur Radio Association now is accepting applications for its annual scholarships. Applicants must be graduating high school seniors in 2001 and hold a valid FCC Amateur Radio license of any class. The DARA scholarships are awarded in varying amounts up to \$2000, as determined by the scholarship committee, and may be used for tuition at an institution of higher learning as outlined in the application. To obtain an application, send a self-addressed stamped envelope to DARA Scholarships, 45 Cinnamon Ct, Springboro, OH 45066. Applications must be postmarked by June 1, 2000.—Stan Kuck, NY8F

* FCC set to authorize MURS: With no further delay, the FCC is set to authorize a new Citizens Band Radio Service to be called the Multi-Use Radio Service, or MURS. The service, which came about as part of the biennial review of Part 90 of the FCC's rules,

will deploy five former Private Land Mobile Radio Service VHF "color dot" channels for voice, data and imaging transmissions. The channels, 151.82, 151.88, 151.94, 154.57 and 154.60--will be authorized for up to 2 W on an unlicensed basis under Part 95 of the FCC's rules. The establishment of MURS was buried within a huge Report and Order and Further Notice of Proposed Rule Making released this summer as WT Docket 98-182 and PR Docket 92-235. The FCC said it will "revisit" the issue of allocating additional MURS channels "at a later date should additional support develop." The effective date to deploy MURS is pending completion of the FCC proceeding.--FCC

* FCC extends filing period in UWB proceeding: The FCC has extended the time period to file reply comments in its proceeding to revise Part 15 regarding ultra-wideband transmission systems (ET Docket 98-153). The deadline has been extended to October 27.--FCC Daily Digest

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